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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------|-----------------------------------|----------------------|---------------------|------------------|
| 10/519,144 | 12/27/2004 | Yutaka Iguchi | Q85436 | 3196 |
| 23373 SUGHRUE MI | 7590 04/28/200 ON, PLLC | EXAMINER | | |
| 2100 PENNSYLVANIA AVENUE, N.W. | | | GETACHEW, ABIY | |
| | SUITE 800 WASHINGTON, DC 20037 | | ART UNIT | PAPER NUMBER |
| | | | 2841 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 04/28/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|------------------------------|--|--|--|--|
| | 10/519,144 | IGUCHI, YUTAKA | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | ABIY GETACHEW | 2841 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 10 Ap | oril 2009 | | | | | |
| | _ · · · · · · · · · · · · · · · · · · · | | | | | |
| 3) Since this application is in condition for allowar | | secution as to the merits is | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-12</u> is/are pending in the application. | | | | | | |
| ,— | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-12</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>27 December 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1. ☐ Certified copies of the priority documents have been received. | | | | | | |
| | <u> </u> | | | | | |
| 2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| dee the attached detailed office action for a list of the certified copies not received. | | | | | | |
| Attachmont/o | | | | | | |
| Attachment(s) 1) X Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Traftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ite | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/10/2009 has been entered.

Claim Objections

2. Claims 2-12 are objected to because of the following informalities: for claims 2-12 "A chip on film film carrier tape" should be replace by "The chip on film film carrier tape". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

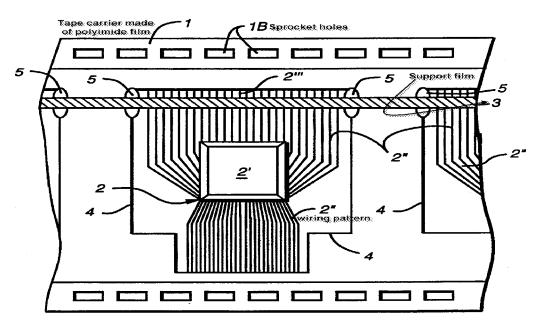
A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu et al. (US 5,427,641) hereinafter refer as Muramatsu.

Regarding claim 1, a chip on film film carrier tape (figure 1 element 1) including a continuous insulating film (Tape carrier 1 may be made of polyimide film), a wiring pattern (figure 1 element 2", i.e. photolithography is performed employing a photoresist

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to pattern and selectively etch the film to form lead patterns 2") formed of a conductor layer (see figures 1 and 2) provided on a surface of the insulating film (Tape carrier 1), and a row of sprocket holes (figure 1 element 1B) for use in conveyance of a film carrier tape provided on either lateral side of the wiring pattern on which electronic devices are to be mounted (Column 1 lines 25-29), characterized in that a center section of the insulating layer (See figures 1 and 2) other than opposite longitudinal edges where the sprocket holes (figure 1 element 1B) are formed is provided with a support film (figure 1 element 3) formed on another surface of the insulating film is provided (figure 1 element 1), which surface is opposite to the surface on which the wiring pattern (see figure 1, the wiring pattern element 2" and the support film element 3); wherein the support film (figure 1 element 3) is not formed on the longitudinal edges of the insulating layer where the sprocket holes are formed; and wherein the support film and the sprocket holes are not coplanar. (As it depicted figure below, support film (element 3) and the sprocket holes (element 1B) are not lying in the same plane).



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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu et al. (US 5,427,641) hereinafter refer as Muramatsu in view of Saito (US 6,320,135 B1).

Regarding claim 2, Muramatsu discloses all the claim limitations except for the row of sprocket holes are provided with a dummy wiring portion surrounding the holes.

Saito discloses Saito discloses wherein the row of sprocket holes (Figure 23 Element 107) are provided with a dummy wiring portion (figure 34 element 3B) surrounding the holes (Figure 23 Element 107). (Furthermore applicant's attention respectfully directed to column 11 lines 45-55).

Muramatsu and Saito are analogous art because they are from the same field of endeavor, mounting of electronic components on carrier tape.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the dummy wiring portion as taught by Saito onto carrier tape as taught by Muramatsu, in order to maintain mechanical strength around the sprocket hole and/or to reinforcing sprocket hole regions.

Regarding claim 3, Muramatsu as modified by Saito discloses wherein the dummy wiring portion (figure 34 element 3B of Saito) is provided in the form of discrete islands each surrounding a sprocket hole. (Column 2 lines 58-60 of Saito).

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Regarding claim 4, Muramatsu as modified by Saito discloses wherein the tape (Figure 23 Element 117of Saito) has a predetermined distance between a longitudinal edge of the insulating layer (Figure 23 Element 101, Column 4 line 49-50 of Saito) and a longitudinal edge of the dummy wiring portion (figure 34 element 3B, Column 6, lines 5-7, Saito teaches the outer longitudinal edge of the metallic layer is set back from its corresponding closest longitudinal edge of the insulating layer at a predetermined distance).

Regarding claim 5, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113) has a thickness which is equal to or less than that of the insulating layer (Figure 23 Element 101). (See figures 1-11 and 23 Saito teaches that the pitch with which the sprocket holes are 4.75+0.04 mm. Thus, a length in the longitudinal direction of 10 to 40 mm corresponding to the three to eight said sprocket holes)

Regarding claim 6, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113 of Saito) has a thickness which is equal to or less than that of the insulating layer (Figure 23 Element 101). (See figures 1-11 and 23 Saito teaches that the pitch with which the sprocket holes are 4.75+0.04 mm. Thus, a length in the longitudinal direction of 10 to 40 mm corresponding to the three to eight said sprocket holes).

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Regarding claim 7, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113 of Saito) has a thickness which is equal to or less than that of the insulating layer (Figure 23 Element 101 of Saito). (See figure 4b of Saito) (See figures 1-11 and 23 Saito teaches that the pitch with which the sprocket holes are 4.75+0.04 mm. Thus, a length in the longitudinal direction of 10 to 40 mm corresponding to the three to eight said sprocket holes).

Regarding claim 8, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113) has a thickness which is equal to or less than that of the insulating layer (Figure 23 Element 101 of Saito). (See figures 1-11 and 23 Saito teaches that the pitch with which the sprocket holes are 4.75+0.04 mm. Thus, a length in the longitudinal direction of 10 to 40 mm corresponding to the three to eight said sprocket holes).

Regarding claim 9, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113 of Saito) has a thickness of 25 to 50 Micro meters. [Column 6 lines 50-53 and Column 8 paragraph 4 lines 34-40].

Regarding claim 10, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113 of Saito) has a thickness of 25 to 50 Micro meters. [Column 8 paragraph 4 lines 34-40 of Saito].

Regarding claim 11, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113) has a thickness of 25 to 50 Micro meters. [Column 8 paragraph 4 lines 34-40 of Saito].

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Regarding claim 12, Muramatsu as modified by Saito discloses wherein the support film (Figure 23 Element 113) has a thickness of 25 to 50 Micro meters. [Column 8 paragraph 4 lines 34-40 of Saito].

Response to Arguments

7. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIY GETACHEW whose telephone number is (571)272-6932. The examiner can normally be reached on Monday to Friday 8Am to 4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DEAN REICHARD can be reached on (571)272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeremy C. Norris/ Primary Examiner, Art Unit 2841

Abiy Getachew Examiner Art Unit 2841

A.G April 21, 2009